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ning of each regular issue of the PCT Gazette.*

(54) Title: METHODS FOR RAPID PURIFICATION OF NUCLEIC ACIDS FOR SUBSEQUENT ANALYSIS BY MASS SPEC-
TROMETRY BY SOLUTION CAPTURE

(57) Abstract: The present invention provides methods for rapid solution capture purification of nucleic acids for subsequent anal-
ysis by electrospray mass spectrometry which is efficient and cost-effective relative to existing methods. The present invention also
provides for kits useful for practicing rapid solution capture of nucleic acids so that purified samples are in condition for analysis by
electrospray mass spectrometry.



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INTERNATIONAL SEARCH REPORT

International app

PCT/US04/15196*

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12P 1/68; C12P 19/34; C07H 19/00

US CL : 435/6, 91.2; 536/22.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/6, 91.2; 536/22.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| X | US 6,274,726 (LAUGHARN, JR et al) 14 August 2001 (14.08.2001) entire document, especially col. 20, line 22-62 | 1-14, 17-20, 26-42 |
| X | JIANG et al. A highly efficient and automated method of purifying and desalting PCR products for analysis by electrospray ionization mass spectrometry. Anal. Biochem, Vol. 316, page 50-57, May 1, 2003. | 1-7, 10-27 |
| Y | | 8-9, 28-42 |



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INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:
EAST, Biosis, Embase, Medline, Caplus, Lifesci databases
search terms: purification, nucleic acids, resin, ion-exchange